VIMPEX

Hydrosense Water Detection

Sprinklers
Communication Centres
Electronic Systems
EDP

Computer Networks
HVAC
IT Suites
Water-cooled Plant
Equipment Rooms
Introduction

The Hydrosense Water Leakage Detection System is designed to protect areas where water ingress could seriously damage electrical, communication and computer networks. When installed in vulnerable areas it continuously monitors for water leaks.

Hydrosense can be installed in a wide range of applications including HVAC, sprinkler systems and water-cooled plant.

Water Detection

A Hydrosense System has two methods of leak detection, **Linear** or **Point**.

**Linear** detection is provided by Hydrowire water sensitive cables connected to the control panel via a special Connection Box using simple two core leader cable.

Available as standard 5 and 10 metre lengths, pre-terminated with DIN plugs, Hydrowire is a flexible cable which will continuously monitor large areas. When even a small amount of water comes into contact with Hydrowire it will trigger an alarm. Hydrowire will dry out in around 20 minutes for use again. Each zone requires a junction box and an end of line plug. For areas where continuous detection is not required zone breaker cables are available.

**Point** detection is provided by Floor, Drip Tray Probes and Float Switches - all connected to the control panel by simple two core leader cable. The Floor Probe is fixed to the floor and adjusted to give the required detection level and connected to the control panel via a junction box. The Drip Tray Probe has exactly the same facilities as the Floor Probe but has a bracket for mounting onto the side of an ACU drip tray.

The Hydrowire and Probes are continuously monitored. Any disconnection or fault is immediately indicated on the control panel. All monitoring indicators can be repeated to remote repeater panels or via volt free contacts to a building management system. When an alarm is raised, Fire-Cryer® voice sounders can be used to broadcast an unambiguous message thus avoiding confusion with other sounders on site.

Features

- Linear detection with Hydrowire
- Point detection with Floor and Drip Tray Probes and Float Switches
- 2 - 24 zone panels
- Choice of panel design and mounting
- Fully monitored detection and alarm circuits
- Easily installed, serviced and maintained
- Dedicated Fire-Cryer® ‘Water Leakage’ messages available
- Remote ‘Water Alarm’ lamp units available
- Zone breaker cables available
- Auxiliary alarm contacts
- Monitored alarm outputs
- Battery backup

Control Panels

The Hydrosense system has a range of attractive and unobtrusive control panels containing the alarm circuitry, power supply and the facility for 24 hour battery standby. There are two types of control panel. The Hydrosense HSCP is available in 2, 4 and 8 zone configurations and the Hydrosense K200000 range for 12 zones or greater. Flush versions and special finishes are also available.

Repeater panels and ancillary PCBs are available to provide common alarm, common fault, coincidence and zonal alarm. Volt free contacts provide control of sub-systems, mimic panels and plant remotely from the main panel over a two wire data bus (see page 4 for the Matrix Mimic Panel).
HSCP Control Panel

Features

- Fully compliant with and tested to BS EN54-2 and BS EN54-4
- Available in 2, 4 or 8 zones
- Compatible for use on BS5839: Part 1: 2002 installations
- 2-wire repeaters and ancillary boards
- Fully programmable using simple menu options
- Simple, single board construction
- Installer friendly
- Two monitored sounder outputs
- 3 Amp power supply
- Auxiliary power output

Specification

Dimensions: 310(h) x 385(w) x 90(d) mm
Construction: 1.2 mm mild steel
Finish: Epoxy powder coated
Colour - lid & box: BS 00 A 05 grey (fine texture)
Colour - controls plate & labels: RAL 7047 light grey (satin)
Supply voltage: 230 V ac (+10 %/-15 %)
Mains supply fuse: 1.6 A, 250 V
Power supply DC rating: 24 V, 3 A
Maximum battery size: 7 Ah, 12 V (2 per panel)
Fault contact rating: 30 V dc, 1A
Local fire contact rating: 30 V dc, 1A
Alarm contact rating: 30 V dc, 1A
Sounder output rating: 0.5 A / output (max 1.6 A over all outputs)
Detection zone current: 1.6 mA
Detection zone EOL resistor: 6.8 kΩ 5 %
Sounder output EOL resistor: 10 kΩ 5 %
Cable capacity: 2.5 mm² per terminal
Temperature: -5 °C to +50 °C
Humidity: <95 % (non condensing)

Product Codes

HSCP-S-2: 2 zone Control Panel
HSCP-S-4: 4 zone Control Panel
HSCP-S-8: 8 zone Control Panel
HSCP-RS-2: 2 zone Repeater Panel
HSCP-RS-4: 4 zone Repeater Panel
HSCP-RS-8: 8 zone Repeater Panel
Larger control panels are available on request

K200000 Control Panel

Features

- Metal Enclosure - 12, 16 & 24 zones, more available on request
- Common fire and fault contacts
- Remote signal contact and isolate
- Zonal one man test
- Zonal volt free contacts
- Zone isolate facility

Specification

Size - 12 zone: 355(h) x 500(w) x 107(d) mm
Size - 16 & 24 zone: 420(h) x 570(w) x 110(d) mm
Construction: 1.2 mm welded sheet steel
Finish: Epoxy powder coated
Standard colour: 2 tone grey
Power supply: 2.5 A
Zonal repeat contacts: Volt free normally open
1 A at 30 V dc
Battery-12/16/24 zone: 7.0/12.0/12.0 Ah Max.
Weight-12/16/24 zone: 8.6/11.0/11.5 kg

Product Codes

K2012003: 12 zone control panel
K2016005: 16 zone control panel
K2024005: 24 zone control panel

Detection Accessories

Specification: Probes

Size: 95(max) x 80(min)(h) x 100(w) x 45(d) mm
Indicator: Green LED
Connection: 4 pin DIN with 1 m flying lead
Material: Black nylon

Product Codes

K2101: Floor mounted probe
K2102: Drip tray probe
K2103: Remote indicator
K2104: 5 metre Hydrowire
K2105: 10 metre Hydrowire
K2106: Hydrowire connection box
K2110: End of line plug
K2111: Leader cable 50 m
K2112: Fixing clips (100)
S 9615/A: Protection cage for floor probe
FC3/A/W/0/S-HYD: Fire-Cryer® Plus voice sounder
K2108: Zone breaker lead 5 m
K2109: Zone breaker lead 10 m
ANC006: D6000 Short-Message Communicator
Matrix Mimic Panel

The Matrix Mimic Panel can be connected to any number of Hydrosense control panels and provides a clear, geographical indication of alarm activation enabling speedy identification of the source of an alarm.

The Matrix system uses flexible fibre optic light guides to illuminate areas on a floor plan laid over a high resolution grid. This unique system dispenses completely with wiring and enables indicators to be moved, removed or added on site. Matrix is housed in attractive, slimline enclosures and with high quality, full colour or monochrome floor plans.

All indicators can be configured to operate via switched positive or negative inputs providing compatibility with a wide range of input/output boards. Matrix can be supplied with or without common LEDs and controls. Optional LEDs indicate Power on, Fire and Fault and optional controls are for Buzzer silence and Lamp test.

Features
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Up to 320 LEDs can be controlled
- Select up to 12 printed colours (not including background and building outline)
- Available in a range of standard enclosures to suit any application
- Bespoke sized units can be made upon request
- Choice of Red, Green or Yellow LEDs
- Available with or without controls
- Matrix can easily be upgraded on site with minimal cost and effort
- EN54-4 approved PSU (optional)

About Vimpex

Vimpex are acknowledged experts in voice sounder and audible/visual evacuation technology. The Fire-Cryer® Voice Sounder is testimony to Vimpex’s enthusiasm for innovation and a fresh approach to evacuation.

From its highly efficient distribution warehouse, Vimpex can supply this complete range of voice sounders, audible and visual alarms and accessories. All bells and sounders can be customer labelled, if required.

Commitment to third party approval and testing has meant massive investment both by Vimpex and its suppliers to gain LPCB approval on a growing mix of products including the Banshee Excel sounders, Fire Alarm Bells and ReSet Call Points.

Short-Message Communicator

The D6000 Short-Message Communicator provides a very cost effective, easy-to-install solution for signalling alarm and other system conditions by sending a SMS text message to the user using GSM technology.

It is the perfect device for remotely monitoring Hydrosense alarms.

Vimpex Limited
Star Lane, Great Wakering
Essex SS3 0PJ England
Tel: +44 (0) 1702 216999
Fax: +44 (0) 1702 216699
E-mail:sales@vimpex.co.uk
www.vimpex.co.uk

We reserve the right to change or amend any design or specification in line with our policy of continuing development and improvement.